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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,451	09/26/2005	Tomoyuki Yagi	03500.018083.	4631

5514 7590 04/19/2007  
FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER
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BOOSALIS, FANI POLYZOS

ART UNIT	PAPER NUMBER
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2884

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/550,451

Applicant(s)

YAGI, TOMOYUKI

Examiner

Faye Boosalis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1:121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/23/06, 12/27/06.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are drawn to a computer program per se. A computer program per se is abstract instructions. Therefore, a computer program is not a physical thing (product) nor a process as they are not "acts" being performed. As such, these claims are not directed to one of the statutory categories of invention (See MPEP 2106.01), but are directed to nonstatutory functional descriptive material.

It is noted that computer programs embodied on a computer readable medium or other structure, which would permit the functionality of the program to be realized, would be directed to a product and be within a statutory category of invention, so long as the computer readable medium is not disclosed as non-statutory subject matter per se (signals or carrier waves).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. "the electric charges accumulated in the photoelectric conversion means are swept out using a capacity formed between the photoelectric conversion means and the control line for the transfer means of the pixels," is not properly defined and therefore the term capacity is unclear. Therefore, claims 2 and 13 are not further examined.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-4, 9, 11-12 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang et al (US 5,869,837 A).

Regarding claims 1, 11-12 and 14-15, Huang discloses a method for controlling a photoelectric conversion device comprising: a plurality of pixels (4) each having, as one unit (See Fig. 2), photoelectric conversion means (capacitive coupling radiation detector) (CCD) for converting light into electric signal to accumulate (i.e. storage capacitor) therein electric charges (See Abstract), and transfer means (read-out switch) (1) for transferring the electric charges accumulated in the photoelectric conversion means, the plurality of pixels (4) being disposed in matrix (See Fig. 3); and means for sweeping out the electric charges accumulated in the photoelectric conversion means through a control line (7) for the transfer means of the pixels disposed along a line

adjacent to the photoelectric conversion means concerned (See Figs. 2-3 and col. 3, lines 4-25).

Regarding claim 3, Huang discloses the photoelectric conversion means includes a MIS type photosensor having a metal, an insulating layer and semiconductor layer. (col. 3, lines 39-47).

Regarding claim 4, Huang discloses the transfer means (3) includes a thin film transistor (TFT) (col. 3, lines 54-56).

Regarding claim 9, Huang discloses wherein an electrical signal amplifier (14) and a vertical scanning circuit (See Fig. 3) suitable for photographing of a moving image are connected to the plurality of pixels (4) disposed in matrix (See Fig. 3), and the electrical signal amplifier and the vertical scanning circuit are driven by utilizing a method suitable for the photographing of the moving image (col. 3, lines 66-67 – col. 4, lines 1-11).

6. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Huang et al (US 5,869,837 A)* as applied to claim 1 above, and further in view of *Kobayashi et al (US 5,841,180 A)*.

Huang et al discloses all the limitations of the parent claim 1, as described above. However, Huang et al are silent with regards to a wavelength conversion. Kobayashi et al discloses a wavelength conversion unit including a phosphor for converting ionizing radiation into visible rays (col. 31, lines 43-45). Thus, it would have been obvious to a person having ordinary skill in the art to modify Huang et al to use a

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wavelength conversion unit so as to enable a wide wavelength band optical sampling system, as taught by Kobayashi et al.

7. Claims 7-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Huang et al* (US 5,869,837 A) as applied to claim 1 above, and further in view of *Kobayashi et al* (JP10-125891).

Huang et al discloses all the limitations of the parent claim 1, as described above. However, Huang et al are silent with regards to a wavelength conversion. Kobayashi et al discloses a bias means for supplying a voltage to the photoelectric conversion means wherein the value of the voltage is different from a value of the voltage when electric charges accumulated in photoelectric conversion means are swept out (See Abstract). Thus, it would have been obvious to a person having ordinary skill in the art to modify Huang et al to use a bias means for supplying a voltage photosensor to maintain sensitivity, as taught by Kobayashi et al.

### **Conclusion**


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Boosalis whose telephone number is 571-272-2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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